

GenCore version 5.1.4 p5 4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 11, 2003, 15:01:04 : Search time 225 Seconds
(without alignments)
16092.417 Million cell updates/sec

Title: US-10-006-911-3

Perfect score: 5421

Sequence: 1 ccggatccgggttttttttgg.....tgtttcaaaaaaaaaaaaaa 5421

Scoring table:

IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 478924 segs, 33395956 residues

Total number of hits satisfying chosen parameters. 261222

Minimum DB seq length: 0

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database: Published Applications NA.*

- 1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
- 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
- 3: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
- 4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
- 5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
- 6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq.*
- 7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
- 8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
- 9: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 10: /cgn2_6/ptodata/1/pubpna/US03_PUBCOMB.seq.*
- 11: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 12: /cgn2_6/ptodata/1/pubpna/US10_PUBCOMB.seq.*
- 13: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUBCOMB.seq.*
- 14: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	30.6	0.6	31	10	US-09-801-274-92
2	30.6	0.6	31	10	US-09-801-274-93
3	28.8	0.5	45	10	US-09-263-959-486
4	27.8	0.5	50	10	US-09-815-343-1012
5	27.6	0.5	50	10	US-09-783-590-6670
6	27.2	0.5	46	10	US-09-827-289-22
7	27.2	0.5	46	10	US-09-827-289-26
8	26.5	0.5	41	10	US-09-263-959-591
9	26.4	0.5	46	10	US-09-827-289-24
10	26.2	0.5	49	10	US-09-828-034-1
11	26.2	0.5	50	10	US-09-896-856-5
12	26	0.5	42	9	US-09-876-235-11
13	26	0.5	42	9	US-09-876-235-13
14	25.8	0.5	45	10	US-09-827-289-14
15	25.8	0.5	45	10	US-09-827-289-18
16	25.6	0.5	46	10	US-09-827-289-20
17	25.6	0.5	50	10	US-09-896-856-5
18	25.4	0.5	50	10	US-09-836-077-19
19	25.2	0.5	39	9	US-10-208-357-4

C 20	24.8	0.5	37	10	US-09-263-959-815	Sequence 815, App
C 21	24.8	0.5	40	10	US-09-263-959-458	Sequence 458, App
C 22	24.8	0.5	44	9	US-10-094-183-9	Sequence 9, Appli
C 23	24.8	0.5	44	9	US-10-094-183-9	Sequence 9, Appli
C 24	24.8	0.5	45	9	US-09-894-916-3	Sequence 3, Appli
C 25	24.8	0.5	45	10	US-09-827-289-21	Sequence 21, Appl
C 26	24.8	0.5	46	10	US-09-827-289-25	Sequence 25, Appl
C 27	24.6	0.5	41	10	US-09-920-591-9	Sequence 9, Appli
C 28	24.4	0.5	36	10	US-09-828-034-2	Sequence 2, Appli
C 29	24.4	0.5	42	9	US-09-876-235-12	Sequence 12, Appl
C 30	24.4	0.5	45	10	US-09-827-289-14	Sequence 14, Appl
C 31	24.4	0.5	45	10	US-09-827-289-18	Sequence 18, Appl
C 32	24.4	0.5	46	10	US-09-827-289-21	Sequence 21, Appl
C 33	24.4	0.5	46	10	US-09-827-289-25	Sequence 25, Appl
C 34	24.2	0.4	44	9	US-10-208-357-5	Sequence 5, Appli
C 35	24.2	0.4	45	9	US-10-043-415-1	Sequence 1, Appli
C 36	24.2	0.4	45	10	US-09-827-289-12	Sequence 12, Appl
C 37	24.2	0.4	45	10	US-09-827-289-16	Sequence 16, Appl
C 38	24	0.4	36	10	US-09-828-034-3	Sequence 3, Appli
C 39	24	0.4	42	9	US-09-876-235-12	Sequence 12, Appl
C 40	24	0.4	45	10	US-09-838-386-17	Sequence 17, Appl
C 41	24	0.4	45	10	US-09-838-386-18	Sequence 18, Appl
C 42	24	0.4	45	10	US-09-827-289-13	Sequence 13, Appl
C 43	24	0.4	45	10	US-09-827-289-17	Sequence 17, Appl
C 44	24	0.4	46	10	US-09-827-289-22	Sequence 22, Appl
C 45	24	0.4	46	10	US-09-827-289-26	Sequence 26, Appl
C 46	23.8	0.4	27	10	US-09-735-363A-6	Sequence 6, Appli
C 47	23.8	0.4	30	9	US-10-217-914-4	Sequence 4, Appli
C 48	23.6	0.4	44	9	US-09-822-789-1	Sequence 1, Appli
C 49	23.6	0.4	48	9	US-09-822-789-2	Sequence 2, Appli
C 50	23.6	0.4	48	9	US-09-822-789-2	Sequence 2, Appli
C 51	23.4	0.4	26	10	US-09-922-480-7	Sequence 7, Appli
C 52	23.4	0.4	26	10	US-09-923-236-7	Sequence 7, Appli
C 53	23.4	0.4	26	10	US-09-923-246-38	Sequence 38, Appl
C 54	23.4	0.4	26	10	US-09-263-959-538	Sequence 538, App
C 55	23.4	0.4	26	10	US-09-828-034-2	Sequence 2, Appli
C 56	23.4	0.4	36	10	US-09-828-034-3	Sequence 3, Appli
C 57	23.4	0.4	38	9	US-10-208-357-2	Sequence 2, Appli
C 58	23.4	0.4	38	9	US-10-208-357-2	Sequence 2, Appli
C 59	23.4	0.4	41	10	US-09-920-581-9	Sequence 9, Appli
C 60	23.4	0.4	45	9	US-09-894-916-3	Sequence 3, Appli
C 61	23.4	0.4	47	9	US-09-853-526-198	Sequence 198, App
C 62	23.4	0.4	47	9	US-09-853-526-275	Sequence 275, App
C 63	23.4	0.4	47	9	US-10-180-819-12	Sequence 12, Appl
C 64	23.4	0.4	47	9	US-10-208-357-10	Sequence 10, Appl
C 65	23.4	0.4	47	10	US-09-901-484A-198	Sequence 198, App
C 66	23.4	0.4	47	10	US-09-901-484A-275	Sequence 275, App
C 67	23.2	0.4	29	9	US-09-282-734-3	Sequence 3, Appli
C 68	23.2	0.4	29	9	US-09-876-235-8	Sequence 8, Appli
C 69	23.2	0.4	30	9	US-10-042-193A-1	Sequence 1, Appli
C 70	23.2	0.4	30	9	US-10-042-193A-2	Sequence 2, Appli
C 71	23.2	0.4	33	10	US-09-263-959-925	Sequence 925, App
C 72	23.2	0.4	39	9	US-10-208-357-4	Sequence 4, Appli
C 73	23.2	0.4	47	9	US-10-180-819-12	Sequence 12, Appl
C 74	23.2	0.4	47	9	US-10-208-357-10	Sequence 10, Appl
C 75	23.2	0.4	50	10	US-09-815-343-1012	Sequence 1012, Ap
C 76	23	0.4	30	10	US-09-891-517-8	Sequence 8, Appli
C 77	23	0.4	38	9	US-10-208-357-2	Sequence 2, Appli
C 78	23	0.4	45	10	US-09-827-289-13	Sequence 13, Appl
C 79	23	0.4	45	10	US-09-827-289-17	Sequence 17, Appl
C 80	22.8	0.4	36	10	US-09-828-034-5	Sequence 5, Appli
C 81	22.8	0.4	41	10	US-09-838-386-15	Sequence 15, Appl
C 82	22.8	0.4	42	9	US-09-876-235-11	Sequence 11, Appl
C 83	22.8	0.4	42	9	US-09-876-235-13	Sequence 13, Appl
C 84	22.6	0.4	26	9	US-09-922-469-6	Sequence 6, Appli
C 85	22.6	0.4	26	10	US-10-039-876A-10	Sequence 10, Appl
C 86	22.6	0.4	26	10	US-09-922-480-6	Sequence 6, Appli
C 87	22.6	0.4	26	10	US-09-923-236-6	Sequence 6, Appli
C 88	22.6	0.4	45	9	US-09-999-734-77	Sequence 77, Appl
C 89	22.6	0.4	47	9	US-09-853-526-198	Sequence 198, App
C 90	22.6	0.4	47	9	US-09-853-526-275	Sequence 275, App
C 91	22.6	0.4	47	10	US-09-901-484A-198	Sequence 198, App
C 92	22.6	0.4	47	10	US-09-901-484A-275	Sequence 275, App

C 93	22.6	0.4	49	10	US-09-833-498-5	Sequence 5, Appli	C 166	21.2	0.4	36	10	US-09-983-580-12	Sequence 12, Appli
C 94	22.6	0.4	50	10	US-09-070-844-9	Sequence 9, Appli	C 167	21.2	0.4	44	9	US-10-045-353-3	Sequence 3, Appli
C 95	22.4	0.4	51	9	US-10-043-415-4	Sequence 4, Appli	C 168	21.2	0.4	46	10	US-09-827-289-20	Sequence 20, Appli
C 96	22.4	0.4	52	9	US-09-320-313-149	Sequence 149, App	C 169	21.2	0.4	46	10	US-09-827-289-24	Sequence 24, Appli
C 97	22.4	0.4	53	9	US-09-949-305B-6	Sequence 6, Appli	C 170	21.2	0.4	50	10	US-09-783-950-6670	Sequence 6670, Ap
C 98	22.4	0.4	54	9	US-09-888-326-841	Sequence 841, App	C 171	21	0.4	51	10	US-09-263-959-807	Sequence 807, App
C 99	22.4	0.4	55	10	US-09-920-342-12	Sequence 12, Appli	C 172	21	0.4	36	9	US-09-876-235-14	Sequence 14, Appli
C 100	22.4	0.4	56	9	US-09-827-734-23	Sequence 23, Appli	C 173	21	0.4	42	9	US-09-931-375A-86	Sequence 86, Appli
C 101	22.4	0.4	57	9	US-09-922-296-10	Sequence 10, Appli	C 174	21	0.4	48	9	US-10-077-493-1	Sequence 1, Appli
C 102	22.4	0.4	58	9	US-09-949-305B-4	Sequence 4, Appli	C 175	21	0.4	49	10	US-09-833-498-6	Sequence 6, Appli
C 103	22.4	0.4	59	10	US-09-099-823-14	Sequence 14, Appli	C 176	20.8	0.4	30	9	US-10-176-055-10	Sequence 10, Appli
C 104	22.4	0.4	60	10	US-09-923-246-39	Sequence 39, Appli	C 177	20.8	0.4	30	10	US-09-891-517-5	Sequence 5, Appli
C 105	22.4	0.4	61	10	US-09-920-342-3	Sequence 3, Appli	C 178	20.8	0.4	30	10	US-09-891-517-11	Sequence 11, Appli
C 106	22.4	0.4	62	9	US-09-888-326-842	Sequence 842, App	C 179	20.8	0.4	40	9	US-09-963-667-18	Sequence 18, Appli
C 107	22.4	0.4	63	9	US-09-827-734-3	Sequence 3, Appli	C 180	20.8	0.4	41	9	US-09-933-797-784	Sequence 784, App
C 108	22.4	0.4	64	9	US-09-876-235-8	Sequence 8, Appli	C 181	20.8	0.4	43	12	US-10-028-780-6	Sequence 6, Appli
C 109	22.4	0.4	65	10	US-09-891-517-7	Sequence 7, Appli	C 182	20.8	0.4	45	10	US-09-838-386-13	Sequence 13, Appli
C 110	22.4	0.4	66	10	US-09-828-034-4	Sequence 4, Appli	C 183	20.8	0.4	46	10	US-09-833-498-2	Sequence 2, Appli
C 111	22.4	0.4	67	10	US-09-910-635-1	Sequence 1, Appli	C 184	20.8	0.4	46	10	US-09-833-498-3	Sequence 3, Appli
C 112	22.4	0.4	68	10	US-09-828-034-1	Sequence 1, Appli	C 185	20.8	0.4	47	10	US-09-833-498-6	Sequence 6, Appli
C 113	22.4	0.4	69	10	US-09-956-412-1	Sequence 1, Appli	C 186	20.8	0.4	49	10	US-09-504-231A-1756	Sequence 1756, Ap
C 114	22.4	0.4	70	10	US-09-766-273-15	Sequence 15, Appli	C 187	20.6	0.4	36	10	US-09-274-553D-1756	Sequence 35, Appli
C 115	22.4	0.4	71	10	US-09-417-386-14	Sequence 14, Appli	C 188	20.6	0.4	38	10	US-09-873-637-35	Sequence 35, Appli
C 116	22.4	0.4	72	10	US-09-939-724-14	Sequence 14, Appli	C 189	20.6	0.4	41	10	US-09-850-165-64	Sequence 64, Appli
C 117	22.4	0.4	73	10	US-10-039-890-14	Sequence 14, Appli	C 190	20.6	0.4	42	9	US-09-929-724-69	Sequence 69, Appli
C 118	22.4	0.4	74	10	US-09-836-077-19	Sequence 19, Appli	C 191	20.6	0.4	47	10	US-09-833-498-3	Sequence 3, Appli
C 119	22.2	0.4	75	10	US-10-217-914-4	Sequence 4, Appli	C 192	20.6	0.4	48	10	US-09-833-498-4	Sequence 4, Appli
C 120	22.2	0.4	76	10	US-09-828-034-4	Sequence 4, Appli	C 193	20.6	0.4	48	10	US-09-436-548-126	Sequence 126, App
C 121	22	0.4	77	9	US-10-042-191A-1	Sequence 1, Appli	C 194	20.4	0.4	26	9	US-10-039-876A-10	Sequence 10, Appli
C 122	22	0.4	78	9	US-10-042-191A-2	Sequence 2, Appli	C 195	20.4	0.4	26	9	US-09-922-480-6	Sequence 6, Appli
C 123	22	0.4	79	10	US-09-263-959-85C	Sequence 855, App	C 196	20.4	0.4	26	10	US-09-923-236-6	Sequence 6, Appli
C 124	22	0.4	80	10	US-09-945-442-13	Sequence 13, Appli	C 197	20.4	0.4	26	10	US-09-923-236-13	Sequence 13, Appli
C 125	22	0.4	81	10	US-09-983-580-13	Sequence 13, Appli	C 198	20.4	0.4	32	9	US-10-038-357-14	Sequence 14, Appli
C 126	22	0.4	82	9	US-09-822-789-1	Sequence 1, Appli	C 199	20.4	0.4	35	9	US-10-034-451-2	Sequence 1, Appli
C 127	21.8	0.4	83	9	US-10-034-451-2	Sequence 2, Appli	C 200	20.4	0.4	36	9	US-09-967-238-13	Sequence 13, Appli
C 128	21.8	0.4	84	10	US-09-838-386-15	Sequence 15, Appli	C 201	20.4	0.4	37	9	US-09-967-238-13	Sequence 13, Appli
C 129	21.8	0.4	85	10	US-09-859-053-1	Sequence 1, Appli	C 202	20.4	0.4	39	10	US-09-785-105-4	Sequence 4, Appli
C 130	21.8	0.4	86	10	US-09-740-002-11	Sequence 11, Appli	C 203	20.4	0.4	45	9	US-09-967-238-11	Sequence 11, Appli
C 131	21.8	0.4	87	10	US-09-728-479-3	Sequence 3, Appli	C 204	20.4	0.4	46	10	US-09-740-002-6	Sequence 6, Appli
C 132	21.8	0.4	88	10	US-09-776-520A-3	Sequence 3, Appli	C 205	20.4	0.4	46	12	US-10-039-890-12	Sequence 12, Appli
C 133	21.6	0.4	89	9	US-09-999-724-68	Sequence 68, Appli	C 206	20.4	0.4	48	9	US-09-822-789-2	Sequence 2, Appli
C 134	21.6	0.4	90	9	US-09-999-724-79	Sequence 79, Appli	C 207	20.4	0.4	48	10	US-09-773-385-3	Sequence 3, Appli
C 135	21.6	0.4	91	10	US-09-969-192-44	Sequence 44, Appli	C 208	20.4	0.4	49	10	US-09-773-385-3	Sequence 3, Appli
C 136	21.6	0.4	92	10	US-09-838-386-17	Sequence 17, Appli	C 209	20.2	0.4	25	9	US-09-282-734-23	Sequence 23, Appli
C 137	21.6	0.4	93	10	US-09-838-386-18	Sequence 18, Appli	C 210	20.2	0.4	25	9	US-09-863-806-120	Sequence 120, App
C 138	21.6	0.4	94	10	US-09-969-192-42	Sequence 42, Appli	C 211	20.2	0.4	26	9	US-09-922-480-7	Sequence 7, Appli
C 139	21.6	0.4	95	9	US-09-557-232-6	Sequence 6, Appli	C 212	20.2	0.4	26	10	US-09-923-236-13	Sequence 13, Appli
C 140	21.6	0.4	96	10	US-09-833-498-4	Sequence 4, Appli	C 213	20.2	0.4	26	10	US-09-923-236-7	Sequence 7, Appli
C 141	21.6	0.4	97	10	US-09-833-498-5	Sequence 5, Appli	C 214	20.2	0.4	26	10	US-09-923-236-7	Sequence 7, Appli
C 142	21.6	0.4	98	10	US-09-796-690-8213	Sequence 8213, Ap	C 215	20.2	0.4	26	10	US-09-923-236-38	Sequence 38, Appli
C 143	21.6	0.4	99	10	US-09-891-517-6	Sequence 6, Appli	C 216	20.2	0.4	27	10	US-09-381-634A-8	Sequence 8, Appli
C 144	21.4	0.4	100	10	US-09-891-517-12	Sequence 12, Appli	C 217	20.2	0.4	30	10	US-09-891-517-7	Sequence 7, Appli
C 145	21.4	0.4	101	10	US-09-891-517-13	Sequence 13, Appli	C 218	20.2	0.4	30	10	US-09-891-517-8	Sequence 8, Appli
C 146	21.4	0.4	102	10	US-09-828-034-5	Sequence 5, Appli	C 219	20.2	0.4	32	9	US-09-993-164-18	Sequence 18, Appli
C 147	21.4	0.4	103	10	US-09-828-034-5	Sequence 5, Appli	C 220	20.2	0.4	35	10	US-09-374-671-100	Sequence 100, App
C 148	21.4	0.4	104	10	US-09-740-002-4	Sequence 4, Appli	C 221	20.2	0.4	36	9	US-09-957-995A-24	Sequence 24, Appli
C 149	21.4	0.4	105	10	US-09-827-289-12	Sequence 12, Appli	C 222	20.2	0.4	38	10	US-09-785-105-3	Sequence 3, Appli
C 150	21.4	0.4	106	10	US-09-827-289-16	Sequence 16, Appli	C 223	20.2	0.4	39	9	US-09-999-724-80	Sequence 80, Appli
C 151	21.4	0.4	107	10	US-09-740-002-3	Sequence 3, Appli	C 224	20.2	0.4	39	10	US-09-884-260A-49	Sequence 49, Appli
C 152	21.4	0.4	108	10	US-10-038-890-3	Sequence 3, Appli	C 225	20.2	0.4	39	10	US-09-969-192-45	Sequence 45, Appli
C 153	21.4	0.4	109	10	US-09-740-002-5	Sequence 5, Appli	C 226	20.2	0.4	41	9	US-10-013-598-3	Sequence 3, Appli
C 154	21.4	0.4	110	10	US-09-740-002-9	Sequence 9, Appli	C 227	20.2	0.4	41	10	US-09-823-648-1	Sequence 1, Appli
C 155	21.4	0.4	111	10	US-09-740-002-1	Sequence 1, Appli	C 228	20.2	0.4	42	10	US-09-838-386-14	Sequence 14, Appli
C 156	21.4	0.4	112	10	US-09-740-002-2	Sequence 2, Appli	C 229	20.2	0.4	45	10	US-09-838-386-13	Sequence 13, Appli
C 157	21.4	0.4	113	10	US-09-740-002-7	Sequence 7, Appli	C 230	20.2	0.4	47	9	US-09-557-232-6	Sequence 6, Appli
C 158	21.2	0.4	114	9	US-09-922-296-10	Sequence 10, Appli	C 231	20	0.4	26	9	US-09-888-326-743	Sequence 743, App
C 159	21.2	0.4	115	9	US-09-949-305B-4	Sequence 4, Appli	C 232	20	0.4	29	10	US-09-746-491-57	Sequence 54, Appli
C 160	21.2	0.4	116	10	US-09-923-246-39	Sequence 39, Appli	C 233	20	0.4	30	9	US-09-853-745-37	Sequence 17, Appli
C 161	21.2	0.4	117	10	US-09-920-342-3	Sequence 3, Appli	C 234	20	0.4	42	9	US-09-733-692A-1	Sequence 1, Appli
C 162	21.2	0.4	118	9	US-09-888-326-842	Sequence 842, App	C 235	20	0.4	48	12	US-10-039-890-14	Sequence 14, Appli
C 163	21.2	0.4	119	10	US-09-841-246C-3	Sequence 3, Appli	C 236	20	0.4	49	10	US-09-740-002-8	Sequence 8, Appli
C 164	21.2	0.4	120	10	US-09-923-246-27	Sequence 27, Appli	C 237	20	0.4	49	10	US-09-740-002-20	Sequence 20, Appli
C 165	21.2	0.4	121	10	US-09-985-442-12	Sequence 12, Appli	C 238	20	0.4	50	10	US-09-783-590-8333	Sequence 8333, Ap

239	19.8	0.4	24	9	US-09-853-526-10	Sequence 10, Appl	312	19.8	0.4	47	9	US-09-904-859-253	Sequence 253, App
240	19.8	0.4	24	10	US-09-901-484A-10	Sequence 10, Appl	313	19.8	0.4	47	9	US-09-909-204-253	Sequence 253, App
241	19.8	0.4	29	10	US-09-746-431-54	Sequence 54, Appl	314	19.8	0.4	47	9	US-09-904-786-253	Sequence 253, App
242	19.8	0.4	30	9	US-09-927-777A-68	Sequence 68, Appl	315	19.8	0.4	47	9	US-09-906-646-253	Sequence 253, App
243	19.8	0.4	30	10	US-09-891-517-5	Sequence 5, Appl	316	19.8	0.4	47	9	US-09-906-700-253	Sequence 253, App
244	19.8	0.4	30	10	US-09-891-517-9	Sequence 9, Appl	317	19.8	0.4	47	10	US-09-904-320-253	Sequence 253, App
245	19.8	0.4	30	10	US-09-891-517-10	Sequence 10, Appl	318	19.8	0.4	47	10	US-09-909-088B-253	Sequence 253, App
246	19.8	0.4	32	9	US-09-760-500A-51	Sequence 51, Appl	319	19.8	0.4	48	9	US-09-864-785-3556	Sequence 3556, App
247	19.8	0.4	32	9	US-09-967-409A-51	Sequence 51, Appl	320	19.6	0.4	26	9	US-09-444-388-1	Sequence 1, Appl
248	19.8	0.4	32	9	US-09-975-062A-51	Sequence 51, Appl	321	19.6	0.4	28	10	US-09-465-589-9	Sequence 9, Appl
249	19.8	0.4	32	9	US-09-976-398A-51	Sequence 51, Appl	322	19.6	0.4	28	10	US-09-465-589-10	Sequence 10, Appl
250	19.8	0.4	32	9	US-09-976-577-51	Sequence 51, Appl	323	19.6	0.4	28	10	US-09-465-589-10	Sequence 10, Appl
251	19.8	0.4	32	9	US-09-976-312-51	Sequence 51, Appl	324	19.6	0.4	47	9	US-09-853-526-267	Sequence 267, App
252	19.8	0.4	32	9	US-09-927-777A-51	Sequence 51, Appl	325	19.6	0.4	47	10	US-09-901-484A-257	Sequence 257, App
253	19.8	0.4	32	9	US-09-966-491A-51	Sequence 51, Appl	326	19.6	0.4	48	9	US-09-999-724-14	Sequence 14, Appl
254	19.8	0.4	32	9	US-09-976-971A-51	Sequence 51, Appl	327	19.6	0.4	48	9	US-09-922-261-225	Sequence 225, App
255	19.8	0.4	32	9	US-09-820-270B-51	Sequence 51, Appl	328	19.6	0.4	49	9	US-09-996-140-100	Sequence 100, App
256	19.8	0.4	32	10	US-09-973-788A-51	Sequence 51, Appl	329	19.4	0.4	21	9	US-09-888-326-840	Sequence 840, App
257	19.8	0.4	32	10	US-09-973-638A-51	Sequence 51, Appl	330	19.4	0.4	26	10	US-09-853-646-3	Sequence 3, Appl
258	19.8	0.4	32	10	US-09-974-007-51	Sequence 51, Appl	331	19.4	0.4	29	10	US-09-853-053-6	Sequence 6, Appl
259	19.8	0.4	32	10	US-09-976-617A-51	Sequence 51, Appl	332	19.4	0.4	30	12	US-10-079-616-23	Sequence 23, Appl
260	19.8	0.4	32	10	US-09-961-949A-51	Sequence 51, Appl	333	19.4	0.4	32	9	US-10-010-731-8	Sequence 8, Appl
261	19.8	0.4	33	9	US-09-876-235-15	Sequence 15, Appl	334	19.4	0.4	32	10	US-09-839-381A-7	Sequence 7, Appl
262	19.8	0.4	36	9	US-09-876-235-14	Sequence 14, Appl	335	19.4	0.4	35	9	US-09-886-342A-18	Sequence 18, Appl
263	19.8	0.4	36	10	US-09-935-247-4	Sequence 4, Appl	336	19.4	0.4	35	9	US-09-927-777A-72	Sequence 72, Appl
264	19.8	0.4	36	10	US-09-935-247-5	Sequence 5, Appl	337	19.4	0.4	35	9	US-10-027-603-18	Sequence 18, Appl
265	19.8	0.4	39	9	US-09-963-667-3	Sequence 3, Appl	338	19.4	0.4	35	9	US-09-841-236C-2	Sequence 2, Appl
266	19.8	0.4	40	9	US-09-963-667-15	Sequence 15, Appl	339	19.4	0.4	36	9	US-10-104-611-15	Sequence 15, Appl
267	19.8	0.4	40	9	US-09-963-667-16	Sequence 16, Appl	340	19.4	0.4	36	9	US-10-112-547-15	Sequence 15, Appl
268	19.8	0.4	40	9	US-09-963-667-17	Sequence 17, Appl	341	19.4	0.4	36	9	US-10-112-541-15	Sequence 15, Appl
269	19.8	0.4	40	10	US-09-263-959-458	Sequence 458, App	342	19.4	0.4	40	9	US-09-963-667-10	Sequence 10, Appl
270	19.8	0.4	41	10	US-09-850-165-63	Sequence 63, Appl	343	19.4	0.4	40	9	US-09-963-667-18	Sequence 18, Appl
271	19.8	0.4	41	10	US-09-263-959-591	Sequence 591, App	344	19.4	0.4	43	10	US-09-784-130-4	Sequence 4, Appl
272	19.8	0.4	45	10	US-09-263-959-486	Sequence 486, App	345	19.4	0.4	45	12	US-10-039-890-11	Sequence 11, Appl
273	19.8	0.4	46	9	US-09-992-598-406	Sequence 406, App	346	19.4	0.4	46	10	US-09-827-289-19	Sequence 19, Appl
274	19.8	0.4	46	9	US-09-989-293A-406	Sequence 406, App	347	19.4	0.4	46	10	US-09-827-289-23	Sequence 23, Appl
275	19.8	0.4	46	9	US-09-989-735-406	Sequence 406, App	348	19.4	0.4	48	10	US-09-775-217-2	Sequence 2, Appl
276	19.8	0.4	46	9	US-09-990-444-406	Sequence 406, App	349	19.4	0.4	48	12	US-10-039-890-15	Sequence 15, Appl
277	19.8	0.4	46	9	US-09-989-730-406	Sequence 406, App	350	19.4	0.4	50	10	US-09-728-479-3	Sequence 3, Appl
278	19.8	0.4	46	9	US-09-990-436-406	Sequence 406, App	351	19.4	0.4	50	10	US-09-776-529A-3	Sequence 3, Appl
279	19.8	0.4	46	9	US-09-991-181-406	Sequence 406, App	352	19.4	0.4	50	10	US-09-783-590-8333	Sequence 8333, App
280	19.8	0.4	46	9	US-09-993-687-406	Sequence 406, App	353	19.2	0.4	24	9	US-10-043-415-4	Sequence 4, Appl
281	19.8	0.4	46	9	US-09-989-734-406	Sequence 406, App	354	19.2	0.4	24	9	US-09-920-313-148	Sequence 148, App
282	19.8	0.4	46	9	US-09-997-653-406	Sequence 406, App	355	19.2	0.4	24	9	US-09-949-305B-6	Sequence 6, Appl
283	19.8	0.4	46	9	US-09-993-667-406	Sequence 406, App	356	19.2	0.4	24	9	US-09-888-326-841	Sequence 841, App
284	19.8	0.4	46	9	US-09-990-438-406	Sequence 406, App	357	19.2	0.4	24	10	US-09-920-342-12	Sequence 12, Appl
285	19.8	0.4	46	9	US-09-990-562-406	Sequence 406, App	358	19.2	0.4	32	9	US-10-208-357-14	Sequence 14, Appl
286	19.8	0.4	46	9	US-09-997-428-406	Sequence 406, App	359	19.2	0.4	32	9	US-10-010-731-8	Sequence 8, Appl
287	19.8	0.4	46	9	US-09-997-666-406	Sequence 406, App	360	19.2	0.4	32	10	US-09-829-381A-7	Sequence 7, Appl
288	19.8	0.4	46	9	US-09-990-711-406	Sequence 406, App	361	19.2	0.4	36	9	US-09-950-933A-99	Sequence 99, Appl
289	19.8	0.4	46	9	US-09-989-726-406	Sequence 406, App	362	19.2	0.4	36	9	US-10-047-593-6	Sequence 6, Appl
290	19.8	0.4	46	10	US-09-989-722-406	Sequence 406, App	363	19.2	0.4	36	9	US-10-090-035-25	Sequence 25, Appl
291	19.8	0.4	46	10	US-09-989-723-406	Sequence 406, App	364	19.2	0.4	36	9	US-10-080-114A-3	Sequence 3, Appl
292	19.8	0.4	46	10	US-09-989-729-406	Sequence 406, App	365	19.2	0.4	36	9	US-10-042-894A-28	Sequence 28, Appl
293	19.8	0.4	46	10	US-09-989-727-406	Sequence 406, App	366	19.2	0.4	36	9	US-09-905-558C-11	Sequence 11, Appl
294	19.8	0.4	46	10	US-09-989-731-406	Sequence 406, App	367	19.2	0.4	36	9	US-10-117-015-9	Sequence 9, Appl
295	19.8	0.4	46	10	US-09-989-732-406	Sequence 406, App	368	19.2	0.4	36	10	US-09-805-311-9	Sequence 9, Appl
296	19.8	0.4	46	10	US-09-991-073-406	Sequence 406, App	369	19.2	0.4	36	10	US-09-780-641-3	Sequence 3, Appl
297	19.8	0.4	46	10	US-09-990-442-406	Sequence 406, App	370	19.2	0.4	36	10	US-09-805-550-5	Sequence 5, Appl
298	19.8	0.4	46	10	US-09-991-163-406	Sequence 406, App	371	19.2	0.4	36	10	US-09-810-264-36	Sequence 36, Appl
299	19.8	0.4	46	10	US-09-993-604-406	Sequence 406, App	372	19.2	0.4	36	10	US-09-835-654-3	Sequence 3, Appl
300	19.8	0.4	46	10	US-09-990-456-406	Sequence 406, App	373	19.2	0.4	36	10	US-09-735-101-3	Sequence 3, Appl
301	19.8	0.4	46	10	US-09-989-721-406	Sequence 406, App	374	19.2	0.4	36	12	US-10-027-559-13	Sequence 13, Appl
302	19.8	0.4	47	9	US-09-905-291A-253	Sequence 253, App	375	19.2	0.4	40	9	US-09-963-667-15	Sequence 15, Appl
303	19.8	0.4	47	9	US-09-902-853-253	Sequence 253, App	376	19.2	0.4	49	9	US-09-907-111-197	Sequence 197, App
304	19.8	0.4	47	9	US-09-907-824-253	Sequence 253, App	377	19.2	0.4	19	10	US-09-863-959-861	Sequence 861, App
305	19.8	0.4	47	9	US-09-907-841-253	Sequence 253, App	378	19.2	0.4	20	10	US-09-752-639-40	Sequence 40, Appl
306	19.8	0.4	47	9	US-09-904-011-253	Sequence 253, App	379	19.2	0.4	20	10	US-09-984-198-40	Sequence 40, Appl
307	19.8	0.4	47	9	US-09-906-742-253	Sequence 253, App	380	19.2	0.4	20	10	US-09-863-959-420	Sequence 420, App
308	19.8	0.4	47	9	US-09-906-838-253	Sequence 253, App	381	19.2	0.4	20	10	US-09-927-777A-69	Sequence 69, Appl
309	19.8	0.4	47	9	US-09-907-613-253	Sequence 253, App	382	19.2	0.4	31	9	US-10-034-451-2	Sequence 2, Appl
310	19.8	0.4	47	9	US-09-907-942-253	Sequence 253, App	383	19.2	0.4	35	9	US-09-963-667-1	Sequence 1, Appl
311	19.8	0.4	47	9	US-09-904-820-253	Sequence 253, App	384	19.2	0.4	39	9		

385	19	0	4	39	9	US-09-963-667-3	Sequence 3, Appli	458	18.4	0.3	37	10	US-09-263-959-815	Sequence 815, Appl
386	19	0	4	40	9	US-09-963-667-7	Sequence 7, Appli	459	18.4	0.3	38	9	US-09-864-785-762	Sequence 762, Appl
387	19	0	4	40	9	US-09-963-667-8	Sequence 8, Appli	460	18.4	0.3	38	9	US-09-978-917A-17	Sequence 17, Appl
388	19	0	4	40	9	US-09-963-667-9	Sequence 9, Appli	461	18.4	0.3	38	9	US-09-978-917A-18	Sequence 18, Appl
389	19	0	4	40	9	US-09-963-667-16	Sequence 16, Appl	462	18.4	0.3	38	9	US-10-057-777-1	Sequence 1, Appli
390	19	0	4	40	9	US-09-963-667-17	Sequence 17, Appl	463	18.4	0.3	41	10	US-09-935-592-4	Sequence 4, Appli
391	19	0	4	40	9	US-09-967-238-10	Sequence 10, Appl	464	18.4	0.3	42	10	US-09-838-386-14	Sequence 14, Appl
392	19	0	4	41	10	US-09-838-386-15	Sequence 15, Appl	465	18.4	0.3	45	9	US-09-793-139-6	Sequence 6, Appli
393	19	0	4	41	10	US-09-848-386-16	Sequence 16, Appl	466	18.4	0.3	45	10	US-09-818-879-B	Sequence 6, Appli
394	19	0	4	42	10	US-09-922-261-182	Sequence 182, App	467	18.4	0.3	45	10	US-09-21-755B-6	Sequence 6, Appli
395	19	0	4	43	9	US-09-938-744-5	Sequence 5, Appli	468	18.4	0.3	46	9	US-10-027-760-2	Sequence 2, Appli
396	19	0	4	47	12	US-10-039-890-13	Sequence 13, Appl	469	18.4	0.3	49	10	US-09-922-261-10A	Sequence 10A, App
397	19	0	4	49	10	US-09-880-578-16	Sequence 16, Appl	470	18.4	0.3	48	12	US-10-039-890-15	Sequence 15, Appl
398	19	0	4	50	9	US-09-796-602-8213	Sequence 8213, Ap	471	18.4	0.3	49	9	US-09-989-364-77	Sequence 77, Appl
399	18	0	3	27	10	US-09-985-911-16	Sequence 16, Appl	472	18.4	0.3	50	10	US-09-918-762-1	Sequence 1, Appli
400	18	0	3	28	10	US-09-771-393-9	Sequence 9, Appli	473	19.2	0.3	36	10	US-09-918-762-8	Sequence 8, Appli
401	18	0	3	31	9	US-09-927-777A-69	Sequence 69, Appl	474	19.2	0.3	36	10	US-09-918-762-8	Sequence 8, Appli
402	18	0	3	31	9	US-09-912-263-178	Sequence 178, App	475	18.2	0.3	30	10	US-09-005-243-36	Sequence 36, Appl
403	18	0	3	31	10	US-09-898-541-19	Sequence 19, Appl	476	18.2	0.3	30	10	US-09-224-683-36	Sequence 36, Appl
404	18	0	3	43	10	US-09-146-157-5	Sequence 5, Appli	477	18.2	0.3	30	10	US-09-891-517-9	Sequence 9, Appl
405	18	0	3	46	12	US-10-039-890-12	Sequence 12, Appl	478	18.2	0.3	30	10	US-09-891-517-13	Sequence 13, Appl
406	18	0	3	47	9	US-10-228-070-25	Sequence 25, Appl	479	18.2	0.3	31	9	US-09-843-676-28	Sequence 28, Appl
407	18	0	3	47	12	US-10-046-722-25	Sequence 25, Appl	480	18.2	0.3	31	9	US-09-762-253-28	Sequence 28, Appl
408	18	0	3	49	9	US-09-796-679-20	Sequence 20, Appl	481	18.2	0.3	31	9	US-09-438-486-28	Sequence 28, Appl
409	18	6	0	27	9	US-10-095-496-19	Sequence 19, Appl	482	18.2	0.3	31	9	US-10-053-758-28	Sequence 28, Appl
410	18	6	0	27	10	US-09-263-959-524	Sequence 524, App	483	18.2	0.3	32	9	US-10-125-635A-375	Sequence 375, App
411	18	6	0	30	10	US-09-891-517-11	Sequence 11, Appl	484	18.2	0.3	33	9	US-09-876-235-15	Sequence 15, Appl
412	18	6	0	30	10	US-09-891-517-12	Sequence 12, Appl	485	18.2	0.3	36	10	US-09-504-231A-2866	Sequence 2866, Ap
413	18	6	0	33	10	US-09-878-454A-10	Sequence 10, Appl	486	18.2	0.3	36	10	US-09-274-553D-2866	Sequence 2866, Ap
414	18	6	0	39	9	US-09-723-658B-43	Sequence 43, Appl	487	18.2	0.3	37	10	US-09-993-170-23	Sequence 23, Appl
415	18	6	0	40	9	US-09-963-667-8	Sequence 8, Appli	488	18.2	0.3	39	9	US-09-963-667-1	Sequence 1, Appli
416	18	6	0	43	7	US-09-945-592-1	Sequence 1, Appli	489	18.2	0.3	40	9	US-09-963-667-7	Sequence 7, Appli
417	18	6	0	44	7	US-08-785-997-45	Sequence 45, Appl	490	18.2	0.3	40	9	US-09-963-667-8	Sequence 8, Appli
418	18	6	0	44	9	US-09-387-340-45	Sequence 45, Appl	491	18.2	0.3	40	9	US-09-963-667-9	Sequence 9, Appli
419	18	6	0	45	9	US-09-938-744-1	Sequence 1, Appli	492	18.2	0.3	40	10	US-09-910-635-1	Sequence 1, Appli
420	18	6	0	45	10	US-09-482-520-2	Sequence 2, Appli	493	18.2	0.3	40	10	US-09-956-041-2	Sequence 1, Appli
421	18	6	0	45	10	US-09-773-882-8	Sequence 8, Appli	494	18.2	0.3	40	10	US-09-766-273-15	Sequence 15, Appl
422	18	6	0	46	9	US-10-085-108-5	Sequence 5, Appli	495	18.2	0.3	41	10	US-09-955-462A-1	Sequence 1, Appli
423	18	6	0	47	7	US-08-325-278-9	Sequence 9, Appli	496	18.2	0.3	43	10	US-09-955-462A-1	Sequence 1, Appli
424	18	6	0	47	9	US-09-496-041-3	Sequence 3, Appli	497	18.2	0.3	43	12	US-10-020-171-30	Sequence 30, Appl
425	18	6	0	47	10	US-09-965-561-2	Sequence 2, Appli	498	18.2	0.3	45	12	US-10-039-890-11	Sequence 11, Appl
426	18	6	0	49	12	US-10-108-208-6	Sequence 6, Appli	499	18.2	0.3	47	9	US-09-853-526-240	Sequence 240, App
427	18	6	0	50	9	US-09-923-070A-6	Sequence 6, Appli	500	18.2	0.3	47	10	US-09-301-484A-240	Sequence 240, App
428	18	4	0	20	9	US-09-760-500A-55	Sequence 55, Appl	501	18.2	0.3	48	9	US-09-956-086-15	Sequence 15, Appl
429	18	4	0	20	9	US-08-771-554-5	Sequence 5, Appli	502	18.2	0.3	48	9	US-09-956-087-15	Sequence 15, Appl
430	18	4	0	20	9	US-09-967-409A-55	Sequence 55, Appl	503	18.2	0.3	48	10	US-09-775-217-2	Sequence 2, Appli
431	18	4	0	20	9	US-09-975-062A-55	Sequence 55, Appl	504	18.2	0.3	50	9	US-09-923-070A-6	Sequence 6, Appli
432	18	4	0	20	9	US-09-976-378A-55	Sequence 55, Appl	505	18.2	0.3	50	9	US-09-950-442-41	Sequence 41, Appl
433	18	4	0	20	9	US-09-976-577-55	Sequence 55, Appl	506	18	0.3	18	9	US-10-011-204-3	Sequence 3, Appli
434	18	4	0	20	9	US-09-966-312-55	Sequence 55, Appl	507	18	0.3	18	9	US-10-011-204-4	Sequence 4, Appli
435	18	4	0	20	9	US-09-927-777A-55	Sequence 55, Appl	508	18	0.3	18	10	US-09-918-186A-38	Sequence 38, Appl
436	18	4	0	20	9	US-09-927-777A-70	Sequence 70, Appl	509	18	0.3	18	10	US-09-918-186A-78	Sequence 78, Appl
437	18	4	0	20	9	US-09-966-491A-55	Sequence 55, Appl	510	18	0.3	18	10	US-09-918-186A-129	Sequence 129, App
438	18	4	0	20	9	US-09-976-971A-55	Sequence 55, Appl	511	18	0.3	18	10	US-09-263-959-515	Sequence 515, App
439	18	4	0	20	9	US-10-208-357-26	Sequence 26, Appl	512	18	0.3	20	10	US-09-263-959-873	Sequence 873, App
440	18	4	0	20	9	US-10-051-643-83	Sequence 83, Appl	513	18	0.3	20	10	US-09-005-243-33	Sequence 33, Appl
441	18	4	0	20	9	US-09-880-505-83	Sequence 83, Appl	514	18	0.3	20	10	US-09-224-683-33	Sequence 33, Appl
442	18	4	0	20	9	US-10-176-055-11	Sequence 11, Appl	515	18	0.3	24	10	US-09-853-526-10	Sequence 10, Appl
443	18	4	0	20	9	US-09-820-279B-55	Sequence 55, Appl	516	18	0.3	24	10	US-09-901-484A-10	Sequence 10, Appl
444	18	4	0	20	9	US-09-888-326-4	Sequence 2, Appli	517	18	0.3	26	10	US-09-853-646-3	Sequence 3, Appli
445	18	4	0	20	9	US-09-888-326-838	Sequence 838, App	518	18	0.3	29	10	US-09-853-053-6	Sequence 6, Appli
446	18	4	0	20	9	US-09-888-326-839	Sequence 839, App	519	18	0.3	30	10	US-09-891-517-10	Sequence 10, Appli
447	18	4	0	20	10	US-09-973-788A-55	Sequence 55, Appl	520	18	0.3	32	10	US-10-073-616-23	Sequence 23, Appl
448	18	4	0	20	10	US-09-973-638A-55	Sequence 55, Appl	521	18	0.3	34	9	US-09-456-038-1	Sequence 1, Appli
449	18	4	0	20	10	US-09-974-007-55	Sequence 55, Appl	522	18	0.3	34	10	US-09-216-323-364	Sequence 364, App
450	18	4	0	20	10	US-09-976-617A-55	Sequence 55, Appl	523	18	0.3	35	9	US-09-773-590-10	Sequence 10, Appl
451	18	4	0	21	10	US-09-961-949A-55	Sequence 55, Appl	524	18	0.3	35	9	US-10-022-189-32	Sequence 32, Appl
452	18	4	0	21	9	US-10-036-321-4	Sequence 4, Appli	525	18	0.3	36	9	US-09-909-724-84	Sequence 84, Appl
453	18	4	0	25	10	US-09-853-646-4	Sequence 4, Appli	526	18	0.3	36	10	US-09-504-231A-1732	Sequence 1732, Ap
454	18	4	0	27	10	US-09-971-611-29	Sequence 29, Appl	527	18	0.3	36	10	US-09-274-553D-1732	Sequence 1732, Ap
455	18	4	0	28	10	US-09-263-959-746	Sequence 746, App	528	18	0.3	37	9	US-10-091-442-12	Sequence 12, Appl
456	18	4	0	30	8	US-08-894-808-11	Sequence 11, Appl	529	18	0.3	37	9	US-09-864-785-1768	Sequence 1768, Ap
457	18	4	0	30	9	US-09-899-615-11	Sequence 11, Appl	530	18	0.3	37	9	US-09-864-795-3814	Sequence 3814, Ap

531	18	0.3	37	10	US-09-140-719-12	Sequence 12, Appl	604	17.8	0.3	47	9	US-09-978-917A-16	Sequence 16, Appl
532	18	0.3	37	10	US-09-371-307-54	Sequence 54, Appl	605	17.8	0.3	47	10	US-09-901-484A-195	Sequence 195, Appl
533	18	0.3	37	10	US-09-939-408A-7	Sequence 7, Appl	606	17.8	0.3	48	10	US-09-955-807-7	Sequence 7, Appl
534	18	0.3	37	10	US-09-312-762A-23	Sequence 23, Appl	607	17.8	0.3	49	9	US-09-151-771-5	Sequence 6, Appl
535	18	0.3	37	10	US-09-817-774-16	Sequence 16, Appl	608	17.8	0.3	49	9	US-10-092-750-222	Sequence 222, Appl
536	18	0.3	37	10	US-09-950-902-7	Sequence 7, Appl	609	17.8	0.3	50	9	US-09-826-115-3	Sequence 3, Appl
537	18	0.3	39	9	US-09-963-667-2	Sequence 2, Appl	610	17.8	0.3	50	10	US-09-783-590-2759	Sequence 2759, Ap
538	18	0.3	39	9	US-09-853-745-31	Sequence 31, Appl	611	17.6	0.3	25	10	US-09-838-386-22	Sequence 22, Appl
539	18	0.3	40	9	US-09-963-667-11	Sequence 11, Appl	612	17.6	0.3	28	10	US-09-959-429	Sequence 429, Appl
540	18	0.3	40	9	US-09-963-667-12	Sequence 12, Appl	613	17.6	0.3	30	12	US-10-021-002-7	Sequence 7, Appl
541	18	0.3	40	9	US-09-963-667-13	Sequence 13, Appl	614	17.6	0.3	31	10	US-09-801-274-929	Sequence 929, Appl
542	18	0.3	40	9	US-09-963-667-14	Sequence 14, Appl	615	17.6	0.3	31	10	US-09-801-274-1105	Sequence 1105, Ap
543	18	0.3	43	9	US-09-943-722-107	Sequence 107, Appl	616	17.6	0.3	32	9	US-09-760-500A-51	Sequence 51, Appl
544	18	0.3	44	9	US-10-025-367-10	Sequence 10, Appl	617	17.6	0.3	32	9	US-09-967-409A-51	Sequence 51, Appl
545	18	0.3	45	10	US-09-827-289-11	Sequence 11, Appl	618	17.6	0.3	32	9	US-09-975-062A-51	Sequence 51, Appl
546	18	0.3	45	10	US-09-827-289-15	Sequence 15, Appl	619	17.6	0.3	32	9	US-09-976-378A-51	Sequence 51, Appl
547	18	0.3	47	9	US-09-853-528-130	Sequence 130, Appl	620	17.6	0.3	32	9	US-09-976-577-51	Sequence 51, Appl
548	18	0.3	47	9	US-09-853-528-131	Sequence 131, Appl	621	17.6	0.3	32	9	US-09-966-312-51	Sequence 51, Appl
549	18	0.3	47	9	US-09-853-528-268	Sequence 268, Appl	622	17.6	0.3	32	9	US-09-927-777A-51	Sequence 51, Appl
550	18	0.3	47	9	US-09-884-948-32	Sequence 32, Appl	623	17.6	0.3	32	9	US-09-966-491A-51	Sequence 51, Appl
551	18	0.3	47	10	US-09-892-864A-31	Sequence 31, Appl	624	17.6	0.3	32	9	US-09-976-971A-51	Sequence 51, Appl
552	18	0.3	47	10	US-09-901-484A-190	Sequence 190, Appl	625	17.6	0.3	32	9	US-09-820-279B-51	Sequence 51, Appl
553	18	0.3	47	10	US-09-901-484A-191	Sequence 191, Appl	626	17.6	0.3	32	10	US-09-336-268-3	Sequence 3, Appl
554	18	0.3	47	10	US-09-901-484A-191	Sequence 191, Appl	627	17.6	0.3	32	10	US-09-973-788A-51	Sequence 51, Appl
555	18	0.3	47	10	US-09-901-484A-268	Sequence 268, Appl	628	17.6	0.3	32	10	US-09-973-638A-51	Sequence 51, Appl
556	18	0.3	48	9	US-09-903-359-5	Sequence 5, Appl	629	17.6	0.3	32	10	US-09-974-007-51	Sequence 51, Appl
557	18	0.3	50	9	US-09-996-956-6	Sequence 6, Appl	630	17.6	0.3	32	10	US-09-976-617A-51	Sequence 51, Appl
558	18	0.3	50	9	US-10-103-002-11	Sequence 11, Appl	631	17.6	0.3	32	10	US-09-961-949A-51	Sequence 51, Appl
559	18	0.3	50	10	US-09-903-496-8	Sequence 8, Appl	632	17.6	0.3	33	10	US-09-361-741-9	Sequence 9, Appl
560	17.8	0.3	22	10	US-09-263-959-808	Sequence 808, Appl	633	17.6	0.3	34	9	US-09-862-847-4	Sequence 4, Appl
561	17.8	0.3	25	9	US-09-899-642-11	Sequence 11, Appl	634	17.6	0.3	36	9	US-10-099-459-9	Sequence 9, Appl
562	17.8	0.3	31	10	US-09-801-274-560	Sequence 660, Appl	635	17.6	0.3	38	10	US-09-884-877-1	Sequence 1, Appl
563	17.8	0.3	31	10	US-09-801-274-1716	Sequence 1716, Appl	636	17.6	0.3	38	10	US-09-884-877-5	Sequence 5, Appl
564	17.8	0.3	33	10	US-09-873-676-43	Sequence 43, Appl	637	17.6	0.3	38	10	US-09-884-877-7	Sequence 7, Appl
565	17.8	0.3	35	9	US-09-927-777A-72	Sequence 72, Appl	638	17.6	0.3	40	10	US-09-361-741-7	Sequence 7, Appl
566	17.8	0.3	35	10	US-09-735-103-5	Sequence 5, Appl	639	17.6	0.3	41	9	US-09-735-056-25	Sequence 25, Appl
567	17.8	0.3	35	10	US-09-867-521-3	Sequence 3, Appl	640	17.6	0.3	42	9	US-10-079-625-39	Sequence 39, Appl
568	17.8	0.3	35	12	US-10-045-428A-5	Sequence 5, Appl	641	17.6	0.3	42	9	US-10-099-700A-12	Sequence 12, Appl
569	17.8	0.3	37	10	US-09-864-785-1877	Sequence 1877, Appl	642	17.6	0.3	42	9	US-10-099-700A-19	Sequence 19, Appl
570	17.8	0.3	37	10	US-09-263-959-743	Sequence 743, Appl	643	17.6	0.3	42	10	US-09-804-898-3	Sequence 3, Appl
571	17.8	0.3	37	10	US-09-263-959-801	Sequence 801, Appl	644	17.6	0.3	42	10	US-09-804-898-5	Sequence 5, Appl
572	17.8	0.3	40	9	US-09-842-552-42	Sequence 42, Appl	645	17.6	0.3	43	9	US-09-804-898-5	Sequence 5, Appl
573	17.8	0.3	41	9	US-09-854-302-3	Sequence 3, Appl	646	17.6	0.3	43	10	US-09-749-873-32	Sequence 32, Appl
574	17.8	0.3	41	10	US-09-853-798-3	Sequence 3, Appl	647	17.6	0.3	43	10	US-09-765-272-428	Sequence 428, Appl
575	17.8	0.3	42	10	US-09-922-261-227	Sequence 227, Appl	648	17.6	0.3	45	9	US-09-911-909A-10	Sequence 10, Appl
576	17.8	0.3	43	9	US-09-326-956-4	Sequence 4, Appl	649	17.6	0.3	45	10	US-09-871-561-21	Sequence 21, Appl
577	17.8	0.3	43	10	US-09-150-811-2	Sequence 2, Appl	650	17.6	0.3	46	10	US-09-263-959-108	Sequence 108, Appl
578	17.8	0.3	43	10	US-09-993-170-21	Sequence 21, Appl	651	17.6	0.3	46	10	US-09-263-959-112	Sequence 112, Appl
579	17.8	0.3	45	9	US-09-905-291A-37	Sequence 37, Appl	652	17.6	0.3	49	10	US-09-943-215-4	Sequence 4, Appl
580	17.8	0.3	45	9	US-10-043-415-1	Sequence 1, Appl	653	17.6	0.3	50	10	US-09-504-231A-2958	Sequence 2958, Ap
581	17.8	0.3	45	9	US-09-902-853-37	Sequence 37, Appl	654	17.4	0.3	19	9	US-09-853-526-515	Sequence 515, Appl
582	17.8	0.3	45	9	US-09-976-740-40	Sequence 40, Appl	655	17.4	0.3	19	9	US-10-208-357-25	Sequence 25, Appl
583	17.8	0.3	45	9	US-09-907-824-37	Sequence 37, Appl	656	17.4	0.3	19	10	US-09-917-138-1	Sequence 1, Appl
584	17.8	0.3	45	9	US-09-907-841-37	Sequence 37, Appl	657	17.4	0.3	19	10	US-09-901-484A-515	Sequence 515, Appl
585	17.8	0.3	45	9	US-09-904-011-37	Sequence 37, Appl	658	17.4	0.3	20	10	US-09-263-959-849	Sequence 849, Appl
586	17.8	0.3	45	9	US-09-747-377-150	Sequence 150, Appl	659	17.4	0.3	22	10	US-09-263-959-614	Sequence 614, Appl
587	17.8	0.3	45	9	US-09-906-742-37	Sequence 37, Appl	660	17.4	0.3	25	9	US-09-771-933-20	Sequence 20, Appl
588	17.8	0.3	45	9	US-09-906-838-37	Sequence 37, Appl	661	17.4	0.3	27	9	US-09-901-910-40	Sequence 4, Appl
589	17.8	0.3	45	9	US-09-907-613-37	Sequence 37, Appl	662	17.4	0.3	28	10	US-09-225-201-12	Sequence 12, Appl
590	17.8	0.3	45	9	US-09-907-942-37	Sequence 37, Appl	663	17.4	0.3	30	9	US-09-927-777A-68	Sequence 68, Appl
591	17.8	0.3	45	9	US-09-904-820-37	Sequence 37, Appl	664	17.4	0.3	31	9	US-10-051-643-84	Sequence 84, Appl
592	17.8	0.3	45	9	US-09-904-859-37	Sequence 37, Appl	665	17.4	0.3	31	9	US-09-880-505-84	Sequence 84, Appl
593	17.8	0.3	45	9	US-09-909-204-37	Sequence 37, Appl	666	17.4	0.3	33	9	US-10-228-070-17	Sequence 17, Appl
594	17.8	0.3	45	9	US-09-904-786-37	Sequence 37, Appl	667	17.4	0.3	33	12	US-10-046-722-17	Sequence 17, Appl
595	17.8	0.3	45	9	US-09-906-646-37	Sequence 37, Appl	668	17.4	0.3	35	10	US-09-735-103-5	Sequence 5, Appl
596	17.8	0.3	45	9	US-09-906-700-37	Sequence 37, Appl	669	17.4	0.3	35	10	US-09-867-521-3	Sequence 3, Appl
597	17.8	0.3	45	10	US-09-962-055-40	Sequence 40, Appl	670	17.4	0.3	35	10	US-09-735-367B-7	Sequence 7, Appl
598	17.8	0.3	45	10	US-09-908-320-37	Sequence 37, Appl	671	17.4	0.3	35	10	US-09-735-367B-14	Sequence 14, Appl
599	17.8	0.3	45	10	US-09-909-088B-37	Sequence 37, Appl	672	17.4	0.3	35	12	US-10-045-428A-5	Sequence 5, Appl
600	17.8	0.3	45	12	US-10-023-529-40	Sequence 40, Appl	673	17.4	0.3	36	9	US-10-051-325-25	Sequence 25, Appl
601	17.8	0.3	45	12	US-10-023-523-40	Sequence 40, Appl	674	17.4	0.3	36	9	US-09-825-805-1495	Sequence 1495, Ap
602	17.8	0.3	47	9	US-09-853-526-195	Sequence 195, Appl	675	17.4	0.3	36	9	US-09-825-805-1497	Sequence 1497, Ap
603	17.8	0.3	47	9	US-09-978-917A-15	Sequence 15, Appl	676	17.4	0.3	37	10	US-09-766-095-5	Sequence 5, Appl

C 677	17.4	0.3	37	10	US-09-766-095-57	Sequence 57, Appl	750	17.2	0.3	33	10	US-09-970-003A-41	Sequence 41, Appl
C 678	17.4	0.3	37	10	US-09-766-095-57	Sequence 71, Appl	C 751	17.2	0.3	34	8	US-08-424-550B-637	Sequence 637, Appl
C 679	17.4	0.3	37	10	US-09-766-095-57	Sequence 85, Appl	752	17.2	0.3	34	10	US-09-987-967-7	Sequence 7, Appl
C 680	17.4	0.3	39	9	US-09-853-745-34	Sequence 34, Appl	C 753	17.2	0.3	35	9	US-09-927-161-29	Sequence 29, Appl
C 681	17.4	0.3	39	10	US-09-725-735A-3	Sequence 3, Appl	C 754	17.2	0.3	35	10	US-09-933-497B-7	Sequence 7, Appl
C 682	17.4	0.3	39	10	US-09-725-735A-3	Sequence 12, Appl	C 755	17.2	0.3	37	10	US-09-754-773-22	Sequence 22, Appl
C 683	17.4	0.3	39	10	US-09-920-552-75	Sequence 75, Appl	C 756	17.2	0.3	38	10	US-09-884-441-277	Sequence 277, Appl
C 684	17.4	0.3	39	10	US-09-954-737-14	Sequence 14, Appl	757	17.2	0.3	39	9	US-09-797-947A-29	Sequence 29, Appl
C 685	17.4	0.3	40	10	US-09-765-272-253	Sequence 253, Appl	758	17.2	0.3	40	9	US-10-028-072-13	Sequence 13, Appl
C 686	17.4	0.3	41	10	US-09-935-592-4	Sequence 4, Appl	C 759	17.2	0.3	40	12	US-10-046-722-13	Sequence 13, Appl
C 687	17.4	0.3	42	10	US-09-795-006A-5	Sequence 5, Appl	C 760	17.2	0.3	41	9	US-10-043-571-13	Sequence 13, Appl
C 688	17.4	0.3	43	10	US-09-795-006A-5	Sequence 14, Appl	C 761	17.2	0.3	44	10	US-09-804-661-15	Sequence 15, Appl
C 689	17.4	0.3	43	10	US-09-795-006A-5	Sequence 1, Appl	C 762	17.2	0.3	44	10	US-09-916-231-26	Sequence 26, Appl
C 690	17.4	0.3	44	10	US-09-930-743-28	Sequence 28, Appl	C 763	17.2	0.3	45	9	US-09-956-086-22	Sequence 22, Appl
C 691	17.4	0.3	45	9	US-09-990-046-22	Sequence 22, Appl	C 764	17.2	0.3	45	9	US-09-956-086-22	Sequence 22, Appl
C 692	17.4	0.3	45	9	US-09-990-046-22	Sequence 26, Appl	C 765	17.2	0.3	46	9	US-09-956-086-22	Sequence 22, Appl
C 693	17.4	0.3	45	9	US-09-990-046-22	Sequence 1, Appl	766	17.2	0.3	47	9	US-09-956-086-13	Sequence 13, Appl
C 694	17.4	0.3	45	9	US-09-990-046-22	Sequence 75, Appl	767	17.2	0.3	47	9	US-09-956-086-13	Sequence 13, Appl
C 695	17.4	0.3	45	9	US-09-990-046-22	Sequence 83, Appl	C 768	17.2	0.3	47	9	US-09-853-526-29	Sequence 29, Appl
C 696	17.4	0.3	45	10	US-09-735-363A-77	Sequence 77, Appl	C 769	17.2	0.3	47	9	US-09-853-526-29	Sequence 191, Appl
C 697	17.4	0.3	45	10	US-09-848-164-75	Sequence 75, Appl	770	17.2	0.3	47	9	US-09-853-526-29	Sequence 210, Appl
C 698	17.4	0.3	45	10	US-09-848-164-75	Sequence 93, Appl	C 771	17.2	0.3	47	9	US-09-853-526-29	Sequence 243, Appl
C 699	17.4	0.3	45	10	US-09-848-164-75	Sequence 4, Appl	C 772	17.2	0.3	47	9	US-09-853-526-29	Sequence 243, Appl
C 700	17.4	0.3	46	10	US-10-135-084-4	Sequence 4, Appl	C 773	17.2	0.3	47	9	US-09-853-526-29	Sequence 23, Appl
C 701	17.4	0.3	46	10	US-10-135-084-4	Sequence 5, Appl	C 774	17.2	0.3	47	10	US-09-943-722-23	Sequence 23, Appl
C 702	17.4	0.3	46	10	US-09-729-658B-52	Sequence 52, Appl	C 775	17.2	0.3	47	10	US-09-943-722-23	Sequence 29, Appl
C 703	17.4	0.3	46	10	US-09-729-658B-52	Sequence 139, Appl	C 776	17.2	0.3	47	10	US-09-943-722-23	Sequence 191, Appl
C 704	17.4	0.3	48	9	US-09-978-917A-33	Sequence 33, Appl	C 777	17.2	0.3	47	10	US-09-943-722-23	Sequence 232, Appl
C 705	17.4	0.3	48	9	US-09-978-917A-33	Sequence 34, Appl	C 778	17.2	0.3	47	10	US-09-943-722-23	Sequence 243, Appl
C 706	17.4	0.3	48	10	US-09-419-305-11	Sequence 11, Appl	C 779	17.2	0.3	47	10	US-09-943-722-23	Sequence 243, Appl
C 707	17.4	0.3	48	12	US-10-026-389-A	Sequence 8, Appl	C 780	17.2	0.3	48	9	US-09-956-086-26	Sequence 26, Appl
C 708	17.4	0.3	49	9	US-09-816-467-4	Sequence 4, Appl	781	17.2	0.3	48	9	US-09-956-086-26	Sequence 191, Appl
C 709	17.4	0.3	50	9	US-09-170-536R-119	Sequence 119, Appl	C 782	17.2	0.3	48	9	US-09-956-086-26	Sequence 56, Appl
C 710	17.4	0.3	50	9	US-09-819-622A-6	Sequence 6, Appl	C 783	17.2	0.3	48	9	US-09-956-086-26	Sequence 191, Appl
C 711	17.4	0.3	50	9	US-10-012-896-969	Sequence 969, Appl	C 784	17.2	0.3	49	9	US-09-976-736-24	Sequence 74, Appl
C 712	17.4	0.3	50	9	US-09-895-814-969	Sequence 12, Appl	C 785	17.2	0.3	50	9	US-10-007-132-9	Sequence 9, Appl
C 713	17.4	0.3	50	10	US-09-896-600A-20	Sequence 20, Appl	786	17.2	0.3	50	10	US-09-223-493-13	Sequence 13, Appl
C 714	17.2	0.3	51	10	US-09-371-307-85	Sequence 7, Appl	C 787	17.2	0.3	50	10	US-09-223-493-13	Sequence 19, Appl
C 715	17.2	0.3	52	10	US-09-987-632-21	Sequence 21, Appl	C 788	17.2	0.3	50	10	US-09-223-493-13	Sequence 26, Appl
C 716	17.2	0.3	52	10	US-09-987-632-21	Sequence 614, Appl	C 789	17.2	0.3	50	10	US-09-223-493-13	Sequence 132, Appl
C 717	17.2	0.3	52	10	US-09-263-969-614	Sequence 614, Appl	C 790	17.2	0.3	50	10	US-09-263-969-614	Sequence 23, Appl
C 718	17.2	0.3	52	9	US-09-754-853A-806	Sequence 896, Appl	C 791	17.2	0.3	50	10	US-09-263-969-614	Sequence 132, Appl
C 719	17.2	0.3	52	9	US-10-176-055-8	Sequence 8, Appl	C 792	17.2	0.3	50	10	US-09-263-969-614	Sequence 132, Appl
C 720	17.2	0.3	52	9	US-10-176-055-8	Sequence 16, Appl	C 793	17.2	0.3	50	10	US-09-263-969-614	Sequence 132, Appl
C 721	17.2	0.3	52	10	US-09-866-108-5505	Sequence 5505, Appl	C 794	17.2	0.3	50	10	US-09-263-969-614	Sequence 488, Appl
C 722	17.2	0.3	52	10	US-09-866-108-5505	Sequence 5505, Appl	C 795	17.2	0.3	50	10	US-09-263-969-614	Sequence 576, Appl
C 723	17.2	0.3	52	10	US-09-866-108-5505	Sequence 5507, Appl	C 796	17.2	0.3	50	10	US-09-263-969-614	Sequence 584, Appl
C 724	17.2	0.3	52	10	US-09-866-108-5505	Sequence 5508, Appl	C 797	17.2	0.3	50	10	US-09-263-969-614	Sequence 584, Appl
C 725	17.2	0.3	52	10	US-10-046-722-16	Sequence 16, Appl	C 798	17.2	0.3	50	10	US-09-263-969-614	Sequence 24, Appl
C 726	17.2	0.3	52	9	US-10-010-066-63	Sequence 63, Appl	C 799	17.2	0.3	50	10	US-09-263-969-614	Sequence 837, Appl
C 727	17.2	0.3	52	9	US-10-010-066-63	Sequence 12, Appl	C 800	17.2	0.3	50	10	US-09-263-969-614	Sequence 84, Appl
C 728	17.2	0.3	52	9	US-10-010-066-63	Sequence 3, Appl	C 801	17.2	0.3	50	10	US-09-263-969-614	Sequence 5, Appl
C 729	17.2	0.3	52	9	US-09-906-410-104	Sequence 106, Appl	C 802	17.2	0.3	50	10	US-09-263-969-614	Sequence 6, Appl
C 730	17.2	0.3	52	9	US-09-906-410-104	Sequence 274, Appl	C 803	17.2	0.3	50	10	US-09-263-969-614	Sequence 3, Appl
C 731	17.2	0.3	52	9	US-09-927-151-27	Sequence 27, Appl	C 804	17.2	0.3	50	10	US-09-263-969-614	Sequence 2, Appl
C 732	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 805	17.2	0.3	50	10	US-09-263-969-614	Sequence 14, Appl
C 733	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 806	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 734	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 807	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 735	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 808	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 736	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 809	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 737	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 810	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 738	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 811	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 739	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 812	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 740	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 813	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 741	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 814	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 742	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 815	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 743	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 816	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 744	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 817	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 745	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 818	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 746	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 819	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 747	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 820	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 748	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 821	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl
C 749	17.2	0.3	52	9	US-09-927-151-27	Sequence 52, Appl	C 822	17.2	0.3	50	10	US-09-263-969-614	Sequence 32, Appl

C 823	17	0.3	31	10	US-09-801-274-1126	Sequence 1126, Ap	896	17	0.3	45	10	US-09-861-292-6	Sequence 6, Appl
C 824	17	0.3	31	10	US-09-820-809-11	Sequence 11, Appl	C 897	17	0.3	45	10	US-09-861-292-7	Sequence 7, Appl
C 825	17	0.3	34	7	US-08-979-847-64	Sequence 64, Appl	C 898	17	0.3	46	9	US-10-085-108-5	Sequence 5, Appl
C 826	17	0.3	34	10	US-09-784-982-9	Sequence 9, Appl	C 899	17	0.3	46	9	US-09-977-418-86	Sequence 86, Appl
C 827	17	0.3	34	10	US-09-764-877-3947	Sequence 3947, Ap	C 900	17	0.3	47	10	US-09-767-352-2	Sequence 26, Appl
C 828	17	0.3	34	10	US-09-955-462A-2	Sequence 2, Appl	C 901	17	0.3	47	10	US-09-989-456-26	Sequence 26, Appl
C 829	17	0.3	35	9	US-09-886-242A-17	Sequence 17, Appl	C 902	17	0.3	48	9	US-10-102-949-1	Sequence 1, Appl
C 830	17	0.3	35	9	US-09-864-785-3813	Sequence 3813, Ap	C 903	17	0.3	48	9	US-09-903-359-4	Sequence 4, Appl
C 831	17	0.3	35	9	US-10-027-603-17	Sequence 17, Appl	C 904	17	0.3	48	9	US-10-083-815-23	Sequence 23, Appl
C 832	17	0.3	35	9	US-09-747-377-438	Sequence 438, Ap	C 905	17	0.3	48	9	US-09-997-968-45	Sequence 45, Appl
C 833	17	0.3	35	9	US-09-757-563-23	Sequence 23, Appl	C 906	17	0.3	48	10	US-09-790-399-2	Sequence 2, Appl
C 834	17	0.3	35	10	US-09-426-548-34	Sequence 34, Appl	C 907	17	0.3	49	9	US-09-944-413-89	Sequence 89, Appl
C 835	17	0.3	36	10	US-09-426-548-112	Sequence 112, Appl	C 908	17	0.3	49	9	US-09-952-598-427	Sequence 427, App
C 836	17	0.3	36	10	US-09-504-231A-1625	Sequence 1625, Ap	C 909	17	0.3	49	9	US-09-944-403-89	Sequence 89, Appl
C 837	17	0.3	36	10	US-09-504-231A-1878	Sequence 1878, Ap	C 910	17	0.3	49	9	US-09-944-896-89	Sequence 89, Appl
C 838	17	0.3	36	10	US-09-504-231A-2284	Sequence 2284, Ap	C 911	17	0.3	49	9	US-09-884-948-18	Sequence 18, Appl
C 839	17	0.3	36	10	US-09-274-553D-1625	Sequence 1625, Ap	C 912	17	0.3	49	9	US-09-944-944-89	Sequence 89, Appl
C 840	17	0.3	36	10	US-09-274-553D-1878	Sequence 1878, Ap	C 913	17	0.3	49	9	US-09-989-293A-427	Sequence 427, App
C 841	17	0.3	36	10	US-09-274-553D-2284	Sequence 2284, Ap	C 914	17	0.3	49	9	US-09-989-735-427	Sequence 427, App
C 842	17	0.3	36	10	US-09-935-247-4	Sequence 4, Appl	C 915	17	0.3	49	9	US-09-970-444-427	Sequence 427, App
C 843	17	0.3	36	10	US-09-935-247-5	Sequence 5, Appl	C 916	17	0.3	49	9	US-09-944-907-89	Sequence 89, Appl
C 844	17	0.3	36	10	US-09-899-569A-9	Sequence 9, Appl	C 917	17	0.3	49	9	US-09-944-929-89	Sequence 89, Appl
C 845	17	0.3	36	10	US-09-263-359-523	Sequence 523, Ap	C 918	17	0.3	49	9	US-09-989-730-427	Sequence 427, App
C 846	17	0.3	37	9	US-09-847-101B-21	Sequence 21, Appl	C 919	17	0.3	49	9	US-09-990-436-427	Sequence 427, App
C 847	17	0.3	38	9	US-09-864-785-821	Sequence 821, Ap	C 920	17	0.3	49	9	US-09-991-181-427	Sequence 427, App
C 848	17	0.3	38	9	US-10-125-635A-373	Sequence 373, Ap	C 921	17	0.3	49	9	US-09-983-687-427	Sequence 427, App
C 849	17	0.3	39	9	US-10-025-367-11	Sequence 11, Appl	C 922	17	0.3	49	9	US-09-989-724-427	Sequence 427, App
C 850	17	0.3	39	9	US-10-114-170-196	Sequence 196, Ap	C 923	17	0.3	49	9	US-09-997-653-427	Sequence 427, App
C 851	17	0.3	39	9	US-09-853-745-34	Sequence 34, Appl	C 924	17	0.3	49	9	US-09-796-679-15	Sequence 15, Appl
C 852	17	0.3	40	9	US-10-135-965-75	Sequence 75, Appl	C 925	17	0.3	49	9	US-09-933-667-427	Sequence 427, App
C 853	17	0.3	40	10	US-09-894-633A-74	Sequence 74, Appl	C 926	17	0.3	49	9	US-09-990-438-427	Sequence 427, App
C 854	17	0.3	41	9	US-10-038-723-56	Sequence 56, Appl	C 927	17	0.3	49	9	US-09-990-562-427	Sequence 427, App
C 855	17	0.3	41	9	US-10-043-573-51	Sequence 51, Appl	C 928	17	0.3	49	9	US-09-997-428-427	Sequence 427, App
C 856	17	0.3	41	10	US-09-823-648-1	Sequence 1, Appl	C 929	17	0.3	49	9	US-09-997-666-427	Sequence 427, App
C 857	17	0.3	42	9	US-09-978-295A-243	Sequence 243, Ap	C 930	17	0.3	49	9	US-09-981-803-36	Sequence 36, Appl
C 858	17	0.3	42	9	US-09-978-697-243	Sequence 243, Ap	C 931	17	0.3	49	9	US-09-990-711-427	Sequence 427, App
C 859	17	0.3	42	9	US-09-870-753-26	Sequence 26, Appl	C 932	17	0.3	49	9	US-09-989-726-427	Sequence 427, App
C 860	17	0.3	42	9	US-09-978-192A-243	Sequence 243, Ap	C 933	17	0.3	49	10	US-09-732-914-120	Sequence 120, App
C 861	17	0.3	42	9	US-09-999-832A-243	Sequence 243, Ap	C 934	17	0.3	49	10	US-09-866-928-89	Sequence 89, Appl
C 862	17	0.3	42	9	US-09-978-189-243	Sequence 243, Ap	C 935	17	0.3	49	10	US-09-989-722-427	Sequence 427, App
C 863	17	0.3	42	10	US-09-737-626A-3	Sequence 3, Appl	C 936	17	0.3	49	10	US-09-989-723-427	Sequence 427, App
C 864	17	0.3	43	9	US-09-185-938A-4	Sequence 4, Appl	C 937	17	0.3	49	10	US-09-989-279-427	Sequence 427, App
C 865	17	0.3	43	10	US-09-811-094-4	Sequence 4, Appl	C 938	17	0.3	49	10	US-09-989-727-427	Sequence 427, App
C 866	17	0.3	43	10	US-09-810-644-4	Sequence 4, Appl	C 939	17	0.3	49	10	US-09-992-864A-17	Sequence 17, Appl
C 867	17	0.3	43	10	US-09-897-006-14	Sequence 14, Appl	C 940	17	0.3	49	10	US-09-944-449-89	Sequence 89, Appl
C 868	17	0.3	43	10	US-09-897-006-36	Sequence 36, Appl	C 941	17	0.3	49	10	US-09-781-902-38	Sequence 38, Appl
C 869	17	0.3	44	10	US-09-880-578-12	Sequence 12, Appl	C 942	17	0.3	49	10	US-09-989-731-427	Sequence 427, App
C 870	17	0.3	44	10	US-09-924-439-3	Sequence 3, Appl	C 943	17	0.3	49	10	US-09-935-592-2	Sequence 2, Appl
C 871	17	0.3	45	9	US-09-793-139-6	Sequence 6, Appl	C 944	17	0.3	49	10	US-09-944-457-89	Sequence 89, Appl
C 872	17	0.3	45	9	US-09-905-291A-47	Sequence 47, Appl	C 945	17	0.3	49	10	US-09-978-274A-14	Sequence 14, Appl
C 873	17	0.3	45	9	US-09-938-744-1	Sequence 1, Appl	C 946	17	0.3	49	10	US-09-989-732-427	Sequence 427, App
C 874	17	0.3	45	9	US-09-902-853-47	Sequence 47, Appl	C 947	17	0.3	49	10	US-09-991-073-427	Sequence 427, App
C 875	17	0.3	45	9	US-09-907-824-47	Sequence 47, Appl	C 948	17	0.3	49	10	US-09-945-587-89	Sequence 89, Appl
C 876	17	0.3	45	9	US-09-907-841-47	Sequence 47, Appl	C 949	17	0.3	49	10	US-09-990-442-427	Sequence 427, App
C 877	17	0.3	45	9	US-09-904-011-47	Sequence 47, Appl	C 950	17	0.3	49	10	US-09-991-163-427	Sequence 427, App
C 878	17	0.3	45	9	US-09-906-742-47	Sequence 47, Appl	C 951	17	0.3	49	10	US-09-945-015-89	Sequence 89, Appl
C 879	17	0.3	45	9	US-09-906-838-47	Sequence 47, Appl	C 952	17	0.3	49	10	US-09-944-396-89	Sequence 89, Appl
C 880	17	0.3	45	9	US-09-907-613-47	Sequence 47, Appl	C 953	17	0.3	49	10	US-09-944-037-89	Sequence 89, Appl
C 881	17	0.3	45	9	US-09-907-942-47	Sequence 47, Appl	C 954	17	0.3	49	10	US-09-993-604-427	Sequence 427, App
C 882	17	0.3	45	9	US-09-904-820-47	Sequence 47, Appl	C 955	17	0.3	49	10	US-09-990-456-427	Sequence 427, App
C 883	17	0.3	45	9	US-09-904-859-47	Sequence 47, Appl	C 956	17	0.3	49	10	US-09-944-432-89	Sequence 89, Appl
C 884	17	0.3	45	9	US-09-909-204-47	Sequence 47, Appl	C 957	17	0.3	49	10	US-09-943-762-89	Sequence 89, Appl
C 885	17	0.3	45	9	US-09-904-786-47	Sequence 47, Appl	C 958	17	0.3	49	10	US-09-944-654-89	Sequence 89, Appl
C 886	17	0.3	45	9	US-09-906-646-47	Sequence 47, Appl	C 959	17	0.3	49	10	US-09-989-721-427	Sequence 427, App
C 887	17	0.3	45	9	US-09-906-700-47	Sequence 47, Appl	C 960	17	0.3	49	10	US-09-943-851A-89	Sequence 89, Appl
C 888	17	0.3	45	10	US-09-818-879-6	Sequence 6, Appl	C 961	17	0.3	49	9	US-09-996-561-18	Sequence 18, Appl
C 889	17	0.3	45	10	US-09-482-520-2	Sequence 2, Appl	C 962	17	0.3	50	9	US-09-905-291A-121	Sequence 121, App
C 890	17	0.3	45	10	US-09-211-755B-6	Sequence 6, Appl	C 963	17	0.3	50	9	US-10-066-500-93	Sequence 93, Appl
C 891	17	0.3	45	10	US-09-921-398-9	Sequence 9, Appl	C 964	17	0.3	50	9	US-09-953-499-13	Sequence 13, Appl
C 892	17	0.3	45	10	US-09-965-602-3	Sequence 3, Appl	C 965	17	0.3	50	9	US-09-902-853-121	Sequence 121, App
C 893	17	0.3	45	10	US-09-773-882-8	Sequence 8, Appl	C 966	17	0.3	50	9	US-09-907-824-121	Sequence 121, App
C 894	17	0.3	45	10	US-09-909-320-47	Sequence 47, Appl	C 967	17	0.3	50	9	US-09-907-841-121	Sequence 121, App
C 895	17	0.3	45	10	US-09-909-088B-47	Sequence 47, Appl	C 968	17	0.3	50	9	US-09-904-011-121	Sequence 121, App

```

C 965      17      0.3      50      9      US-09-906-742-121
C 970      17      0.3      50      9      US-09-906-938-121
C 971      17      0.3      50      9      US-09-907-613-121
C 972      17      0.3      50      9      US-09-907-942-121
C 973      17      0.3      50      9      US-10-011-931-74
C 974      17      0.3      50      9      US-10-002-796-93
C 975      17      0.3      50      9      US-10-066-273-93
C 976      17      0.3      50      9      US-10-066-494-93
C 977      17      0.3      50      9      US-09-904-820-121
C 978      17      0.3      50      9      US-09-904-859-121
C 979      17      0.3      50      9      US-09-904-904-121
C 980      17      0.3      50      9      US-09-904-786-121
C 981      17      0.3      50      9      US-09-906-646-121
C 982      17      0.3      50      9      US-09-906-700-121
C 983      17      0.3      50      9      US-10-066-269-93
C 984      17      0.3      50      9      US-09-874-547-7
C 985      17      0.3      50      10     US-09-906-320-121
C 986      17      0.3      50      10     US-09-909-088B-121
C 987      17      0.3      50      10     US-09-955-410-4
C 988      16.8    0.3      20      10     US-09-955-410-4
C 989      16.8    0.3      20      10     US-09-955-410-5
C 990      16.8    0.3      21      9      US-10-103-480-4
C 991      16.8    0.3      21      10     US-09-828-934-14
C 992      16.8    0.3      24      9      US-10-081-817-15
C 993      16.8    0.3      28      10     US-09-898-779-43
C 994      16.8    0.3      28      9      US-09-811-093-11
C 995      16.8    0.3      29      9      US-10-180-819-10
C 996      16.8    0.3      29      9      US-09-476-276-26
C 997      16.8    0.3      29      9      US-10-217-914-10
C 998      16.8    0.3      29      9      US-09-888-326-131
C 999      16.8    0.3      29      10     US-09-946-678-22
1000      16.8    0.3      30      9      US-09-894-808-8

```

ALIGNMENTS

```

RESULT 1
US-09-801-274-92
; Sequence 92, Application US/0901274
; Patent No. US20020150891A1
; GENERAL INFORMATION:
; APPLICANT: Cargill, Michele
; APPLICANT: Ireland, James S.
; TITLE OF INVENTION: HUMAN SINGLE NUCLEOTIDE POLYMORPHISMS
; FILE REFERENCE: 2005 2000-001
; CURRENT APPLICATION NUMBER: US/09-801,274
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: US 60/187,510
; PRIOR FILING DATE: 2000-03-07
; PRIOR APPLICATION NUMBER: US 60/206,129
; PRIOR FILING DATE: 2000-05-22
; NUMBER OF SEQ ID NOS: 1802
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 92
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-801-274-92

```

```

Query Match      0.5%; Score 30.6; DB 10; Length 31;
Best Local Similarity 0.6%; Pred. No. 6.4e-02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

```

CY 1-573 GGCACAGGTTCTGTCCTTGGACCACT 1703
|||||
Db 1 GGCACAGGTTCTGTCCTTGGACCACT 31

```

```

RESULT 2
US-09-801-274-93
; Sequence 93, Application US/0901274

```

```

; Patent No. US20020150891A1
; GENERAL INFORMATION:
; APPLICANT: Cargill, Michele
; APPLICANT: Ireland, James S.
; APPLICANT: Lander, Eric S.
; TITLE OF INVENTION: HUMAN SINGLE NUCLEOTIDE POLYMORPHISMS
; FILE REFERENCE: 2005 2000-001
; CURRENT APPLICATION NUMBER: US/09-801,274
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: US 60/187,510
; PRIOR FILING DATE: 2000-03-07
; PRIOR APPLICATION NUMBER: US 60/206,129
; PRIOR FILING DATE: 2000-05-22
; NUMBER OF SEQ ID NOS: 1802
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 93
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-801-274-93

```

```

Query Match      0.6%; Score 30.6; DB 10; Length 31;
Best Local Similarity 0.6%; Pred. No. 6.4e-02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

```

CY 2317 GGTACGGGACGTGGCCATTGCACCTTAAC 2347
|||||
Db : GGTACGGGACGTGGCCATTGCACCTTAAC 31

```

```

RESULT 3
US-09-263-959-486
; Sequence 486, Application US/09263959
; Patent No. US20020150891A1
; GENERAL INFORMATION:
; APPLICANT: Hood, Leroy E.
; APPLICANT: Rowen, Lee
; APPLICANT: Koop, Ben F.
; TITLE OF INVENTION: DIAGNOSTIC AND THERAPEUTIC COMPOSITIONS AND METHODS WHICH USE
; NUMBER OF SEQUENCES: 1279
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Seed and Berry LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: US
; ZIP: 98104-7022
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/263,959
; FILING DATE: 05-MAR-1999
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Mcmasters, David D.
; REGISTRATION NUMBER: 33,963
; REFERENCE/DOCYET NUMBER: 920010.426C2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO. 486:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 45 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-263-959-486

```

```

Query Match      0.5%; Score 28.8; DB 10; Length 45;
Best Local Similarity 82.5%; Pred. No. 2e-03;

```


; Sequence 2, Application: JS/09828034

```

; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: U.S. 60/194843
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 46
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Pl primer for
; OTHER INFORMATION: use in allele discrimination
US-09-827-289 21

Query Match          0.5%; Score 24.4; DB 10; Length 46;
Best Local Similarity 82.4%; Pred. No. 2e+04;
Matches 28; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 3124 TTCCTTCCTTTTGTGTTTTGGTTTTTTTAA 3157
Db 1 TTTTTCCTTTTTCCTTTTTCCTTTTTCCTTTCA 34

RESULT 33
US-09-827-289 25
; Sequence 25, Application US/09827289
; Patent No. US20020009716A1
; GENERAL INFORMATION:
; APPLICANT: Abarzua, Patricia
; TITLE OF INVENTION: Process for Allele Discrimination Using Primer
; FILE REFERENCE: 469290-55
; CURRENT APPLICATION NUMBER: US/09/927,289
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: U.S. 60/194843
; PRIOR FILING DATE: 2000-04-05
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 25
; LENGTH: 46
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Pl primer for
; OTHER INFORMATION: use in allele discrimination
US-09-827-289 25

Query Match          0.5%; Score 24.4; DB 10; Length 46;
Best Local Similarity 82.4%; Pred. No. 2e+04;
Matches 29; Conservation 0; Mismatches 6; Indels 0; Gaps 0;

QY 3124 TTCCTTCCTTTTGTGTTTTGGTTTTTTTAA 3157
Db 1 TTTTTCCTTTTTCCTTTTTCCTTTTTCCTTTCA 34

RESULT 34
US-10-208-357-5/c
; Sequence 5, Application US/10208357
; Publication No. US20020182687A1
; GENERAL INFORMATION:
; APPLICANT: Kurz, Markus
; APPLICANT: Lohse, Peter
; APPLICANT: Wagner, Richard
; TITLE OF INVENTION: Fast, In-Situ Accepted Ligation Methods
; FILE REFERENCE: 50036/031002
; CURRENT APPLICATION NUMBER: US/10/208,357
; CURRENT FILING DATE: 2002-07-30
; PRIOR APPLICATION NUMBER: US/09/619,103
; PRIOR FILING DATE: 2000-07-19
; PRIOR APPLICATION NUMBER: 60/145,834
; PRIOR FILING DATE: 1999-07-27
; NUMBER OF SEQ ID NOS: 26

```


